

(19) World Intellectual Property
Organization
International Bureau



08 JUN 2005



(43) International Publication Date
24 June 2004 (24.06.2004)

PCT

(10) International Publication Number
WO 2004/052197 A1

- (51) International Patent Classification⁷: A61B 5/04 (81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (21) International Application Number: PCT/KR2003/002692
- (22) International Filing Date: 9 December 2003 (09.12.2003)
- (25) Filing Language: Korean
- (26) Publication Language: English (84) Designated States (*regional*): ARIPO patent (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).
- (30) Priority Data:
10-2002-0079394
12 December 2002 (12.12.2002) KR
- (71) Applicant and
(72) Inventor: LEE, Sang Moon [US/KR]; Suite #1101, LG Twintel Bldg., 157-8 Samsung-Dong, Kangnam-Ku, 135-090 Seoul (KR).
- (74) Agent: LEE, Sang Jin; Vision International, 3rd Floor, Dukwon Building, 637-19, Yeoksam-dong, Gangnam-gu, Seoul 135-080 (KR).
- Published:
— with international search report
- For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: SOLID BIO-MATERIAL FOR A SENSOR THAT DETECTS BIO-ELECTRIC SIGNALS THROUGH THE USE OF THE CHARACTERISTICS AND FUNCTIONS OF BIO-EPIDERMAL TISSUES AND EPIDERMAL TISSUES OF LIVING ORGANISMS AND THE METHODS FOR PRODUCING THE SAME

(57) **Abstract:** The present invention discloses a solid bio-material for the detection of a bio-electromagnetic signal, which senses an information signal generated from living organisms and changes thereof by using fish scale, feathers of fowl and carapaces of tortoises among epidermal tissues of animals having the function of detecting, memorizing and transferring a weak information signal (bio-signal) of an electromagnetic field generated from bio-tissues, and a method for producing the same. The method for producing a solid bio-material for the detection of a bio-electromagnetic signal by using epidermal tissues of living organisms comprises the steps of: immersing the carcass of an animal with a developed epidermis such as fish, fowl, tortoises, etc. in a mixed solution of aromatics (fragrance), salt and water in the ratio of 1:2:300 for one week; separating the epidermis from the immersed living organism; washing the separated epidermis, soaking it in a mixed solution of potassium dichromate, vinegar and water in the ratio of 1:1:100 for 10 to 12 hours, applying a medium pressure thereto for 48 hours under an ambient temperature, and then drying it; applying heat of 40°C and a cold air of -25°C temperature in turn to the dried epidermis in a medium pressure state, two or three times in a period of 24 hours each; sterilizing the hot and cold treated epidermis by irradiating ultraviolet rays thereto with a 240nm ultraviolet lamp for 30 minutes; generating static electricity by putting the sterilized epidermis in an electric cylinder and turning it at 500RPM; applying pine nut oil to the outer surface of the electro statically processed epidermis; and cutting the epidermis into required sizes.

WO 2004/052197 A1